WHAT IS CLAIMED IS:

1.   A magnetic tape recording apparatus for recording digital data in tracks of a magnetic tape by a rotary head, said magnetic tape recording apparatus comprising:

video data creation means for coding an input video picture in order to create video data;

search data creation means for creating search data on the basis of said video data; and

formatting means for performing formatting so that said video data and said search data are stored in said tracks of said magnetic tape,

wherein said formatting means places a predetermined number of sync blocks in one of said tracks, places, in one of said sync blocks, a detection pattern for detecting a sync block, identification information for identifying said sync block, main data, and an error-correcting intra code for said identification information and said main data, and places the address corresponding to said stored search data on the display picture, in said main data of said sync block when said sync block stores said search data.

2.   A magnetic tape recording apparatus according to Claim 1, further comprising bit rate control means for controlling the bit rate of said video data output by said

video data creation means.

3.   A magnetic tape recording apparatus according to
Claim 1, further comprising bit rate control means for
controlling the bit rate of said search data output by said
search data creation means.

4.   A magnetic tape recording apparatus according to
Claim 1, further comprising signal generation means for
generating a signal for indicating the position at which
said search data is stored in said track of said magnetic
tape,
    wherein said formatting means performs formatting so
that said search data is stored at the position of said
track of said magnetic tape, which corresponds to said
signal.

5.   A magnetic tape recording method for recording
digital data in tracks of a magnetic tape by a rotary head,
said magnetic tape recording method comprising the steps of:
    coding an input video picture in order to create video
data;
    creating search data on the basis of said video data;
and
    performing formatting so that said video data and said

search data are stored in said tracks of said magnetic tape,

wherein the process of said formatting step places a predetermined number of sync blocks in one of said tracks, places, in one of said sync blocks, a detection pattern for detecting a sync block, identification information for identifying said sync block, main data, and an error-correcting intra code for said identification information and said main data, and places the address corresponding to said stored search data on the display picture, in said main data of said sync block when said sync block stores said search data.

6. A recording medium having recorded therein a computer-readable program for use with a magnetic tape recording process for recording digital data in tracks of a magnetic tape by a rotary head, said program comprising the steps of:

coding an input video picture in order to create video data;

creating search data on the basis of said video data; and

performing formatting so that said video data and said search data are stored in said tracks of said magnetic tape,

wherein the process of said formatting step places a predetermined number of sync blocks in one of said tracks,

places, in one of said sync blocks, a detection pattern for detecting a sync block, identification information for identifying said sync block, main data, and an error-correcting intra code for said identification information and said main data, and places the address corresponding to said stored search data on the display picture, in said main data of said sync block when said sync block stores said search data.

7. A magnetic tape playback apparatus for reading, by a rotary head, digital data containing the address of search data on the display picture, which is recorded in a magnetic tape, said magnetic tape playback apparatus comprising:

extraction means for extracting said address of said search data on the display picture from said read digital data;

combining means for performing combining by placing said search data at a predetermined position on the basis of said extracted address; and

output means for outputting said search data combined by said combining means as one image.

8. A magnetic tape playback method for use with a magnetic tape playback apparatus for reading, by a rotary head, digital data containing the address of search data on

the display picture, which is recorded in a magnetic tape, said magnetic tape playback method comprising the steps of:

extracting said address of said search data on the display picture from said read digital data;

performing combining by placing said search data at a predetermined position on the basis of said extracted address; and

controlling the output so that said search data combined in said combining step is output as one image.

9.   A recording medium having recorded therein a computer-readable program for use with a playback process for reading, by a rotary head, digital data containing the address of search data on the display picture, which is recorded in a magnetic tape, said program comprising the steps of:

extracting said address of said search data on the display picture from said read digital data;

performing combining by placing said search data at a predetermined position on the basis of said extracted address; and

controlling the output so that said search data combined in said combining step is output as one image.

10.   A format of a magnetic tape in which digital data

is recorded in tracks by a rotary head, wherein in one of said tracks, a predetermined number of sync blocks is placed continuously; in one of said tracks, a detection pattern for detecting a sync block, identification information for identifying said sync block, main data, and an error-correcting intra code for said identification information and said main data are placed; and when said sync block stores said search data, the address corresponding to said search data on the display picture is placed in said main data of said sync block.